

## **TIME VARIANT VIBRATION STIMULUS RESPONSE FOR A CONSCIOUS SEDATION SYSTEM**

### **ABSTRACT**

A conscious sedation system and method using time variant vibration stimuli to assess the level of sedation of a patient. The method for determining the level of sedation in a patient who is receiving a conscious sedation drug comprising applying a first vibration stimuli to a patient, the vibration stimuli comprising vibratory pulses wherein each pulse is separated from a prior pulse by a time interval, and the time interval between the pulses can be varied, and wherein each pulse is applied with a predetermined duration, monitoring a patient's response to the vibration stimuli applying an additional vibration stimuli to the patient, wherein the second vibration stimuli can be the same or different as the first stimuli, and wherein the time interval between the pulses and/or the duration of the pulses can be altered, monitoring the patient's response to the additional vibration stimuli, and repeating the steps of applying the additional stimuli and monitoring the patient's response to the additional vibration stimuli to determine the patient's level of sedation. In another embodiment, a conscious sedation system for applying the method described above.